

Abstract of the Disclosure

The present invention is an electronic interconnect comprising a bond pad consisting essentially of aluminum and copper and configured for use in semiconductor electronic devices to couple a bond wire to an integrated circuit package. The bond pad has an oxide coating residing on at least a topmost surface of the bond pad. The oxide coating consists essentially of aluminum, copper, and oxygen. Therefore, the bond pad has little, if any, naturally occurring corrosion products such as hydrated aluminum hydroxide ($\text{Al}(\text{OH})_3$) and/or Al_2Cu particles. $\text{Al}(\text{OH})_3$ films and Al_2Cu particles have been shown to form on aluminum copper bond pads, preventing effective wire-bonding.